

CLAIMS

1. A method of detecting a filter change in an engine, the method comprising the steps of:

monitoring a fluid pressure in said engine following startup of the engine;

5 detecting a change in an amount of time required for the fluid pressure to reach a pre-determined level; and

resetting a fluid life monitoring system based on said change in the amount of time for the fluid pressure to reach a pre-determined level.

2. The method of claim 1 wherein said step of resetting said fluid life monitoring system comprises the step of setting a flag in a memory location.

3. The method of claim 1 further comprising the step of performing additional data processing after detecting said change in the amount of time required for said fluid pressure to reach a pre-determined level.

4. The method of claim 1 further comprising the step of storing at least one data element related to said change in the amount of time required for said fluid pressure to reach a pre-determined level.

5. The method of claim 1 wherein said step of detecting said change in the amount of time required for said fluid pressure to reach a pre-determined level comprises the step of comparing an actual length of time required for said fluid pressure to reach a pre-determined level with an expected length of time.

6. The method of claim 5 wherein said step of comparing said actual length of time required for said fluid pressure to reach said pre-determined level with an expected length of time comprises the steps of averaging a plurality of actual length of times required for said fluid pressure 5 to reach said pre-determined level, thereby determining said expected length of time.

7. The method of claim 4 wherein said step of storing at least one data element related to said change in the amount of time required for said fluid pressure to reach a pre-determined level comprises the step of storing an odometer reading in said memory location.

8. The method of claim 4 wherein said step of storing at least one data element related to said change in the amount of time required for said fluid pressure to reach a pre-determined level in a memory location comprises the step of storing a date in said memory location.

9. The method of claim 4 wherein said step of storing at least one data element related to said change in the amount of time required for said fluid pressure to reach a pre-determined level in a memory location comprises the step of storing an odometer reading and a date in said memory location.

10. The method of claim 1 wherein the resetting step comprises resetting the fluid life monitoring system if the amount of time exceeds a threshold period of time.

11. A fluid monitoring system for an engine containing a lubricating fluid, the fluid monitoring system comprising:

a pressure monitor coupled to said engine configured to provide an indication of a fluid pressure;

5 an engine control module configured to receive the indication of the fluid pressure, to monitor changes in the fluid pressure over a time period following startup of the engine, to detect a change in an amount of time for said fluid to reach a pre-determined fluid pressure, and to reset the fluid monitoring system in response to the change in the amount of time.

12. The fluid monitoring system of claim 11 wherein said engine control module is further configured to set a flag after detecting said change in the amount of time for said lubricating fluid to reach a pre-determined fluid pressure.

13. The fluid monitoring system of claim 12 wherein said flag comprises a memory location in the engine control module.

14. The fluid monitoring system of claim 11 further comprising a vehicle data module coupled to said engine control module, said vehicle data module being configured to supply at least one data element to said engine control module.

15. The fluid monitoring system of claim 11 further comprising an interface coupled to said engine control module, said interface being configured to provide at least one signal for indicating the need for replacing said lubricating fluid.

16. The fluid monitoring system of claim 11 further comprising:

- an engine control module coupled to said pressure monitor;
- a vehicle data module coupled to said engine control module, said
- 5 vehicle data module being configured to supply at least one data element to said engine control module; and
- an interface coupled to said engine control module, said interface being configured to provide at least one signal for indicating the need for replacing said lubricating fluid.

17. The fluid monitoring system of claim 16 wherein said engine control module comprises a memory, said memory being configured to store at least one data element associated with replacing said lubricating fluid.

18. A method of resetting a fluid life monitoring system in an engine, the method comprising the steps of:

- monitoring a fluid pressure following startup of said engine;
- 5 evaluating the actual length of time required for said fluid pressure to reach a pre-determined level;
- comparing said actual length of time to an expected length of time;
- setting a flag in a first memory location, based on a difference between said actual length of time and said expected length of time, thereby
- 10 resetting a fluid life monitoring system; and
- storing at least one data element related to said difference between said actual length of time and said expected length of time in a second memory location.

19. The method of claim 18 wherein step of storing at least one data element related to said difference between said actual length of time and said expected length of time in a second memory location comprises the step of storing an odometer reading in said second memory location.

20. The method of claim 18 wherein step of storing at least one data element related to said difference between said actual length of time and said expected length of time in a second memory location comprises the step of storing a date in said second memory location.

21. The method of claim 18 further comprising the step of providing a fluid change history report.

22. A digital storage medium having computer-executable instructions stored thereon, the instructions comprising:

a first module configured to detect a filter change in an engine, the method comprising the steps of:

5 a second module configured to monitor a fluid pressure in said engine following startup of the engine;

a third module configured to detect a change in an amount of time required for the fluid pressure to reach a pre-determined level; and

10 a fourth module configured to reset a fluid life monitoring system based on said change in the amount of time for the fluid pressure to reach a pre-determined level.